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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,355	07/02/2004	Toru Iwai	SIC-04-010	8415

29863 7590 10/16/2008

DELAND LAW OFFICE
P.O. BOX 69
KLAMATH RIVER, CA 96050-0069

EXAMINER	
KING, BRADLEY T	

ART UNIT	PAPER NUMBER
3657	

MAIL DATE	DELIVERY MODE
10/16/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/710,355	IWAI ET AL.	
	Examiner	Art Unit	
	Bradley T. King	3657	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 July 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *3-5,7-9,13,14 and 18-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *3-5,7-9,13,14 and 18-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

In view of the Appeal Brief filed on 7/16/2008, PROSECUTION IS HEREBY REOPENED. A new grounds of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/Robert A. Siconolfi/

Supervisory Patent Examiner, Art Unit 3657

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 3-5, 7-9, 13, 14 and 18-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Independent claims 13 and 17 have been amended to recite "the first rotor member, the first second rotor member, and the second second rotor member are sandwiched between the plurality of fasteners and the hub mounting member and so that the first second rotor member and the second second rotor member are pressed towards the first rotor member with a compressive force by the plurality of fasteners and the hub mounting member to prevent delamination of the first rotor member, the first second rotor member, and the second second." The original disclosure fails to support this limitation.

Claim Rejections - 35 USC § 103

Claims 3-5, 7-9, and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Otomo (JP 2679162) in view of Shima et al (JP 56134089).

Otomo teaches a disk brake rotor apparatus capable of use as a bicycle brake rotor comprising: a generally circular first rotor (1) member with a first fixing (5) component structured to mount the first rotor member to a hub mounting member, a

generally circular first second rotor (2) member with a first second fixing component (5) structured to mount the first second rotor member to the hub mounting member, wherein the first rotor member is attached to a side of the first second rotor member, and wherein the first second rotor member is formed of a material having greater braking wear resistance than the first rotor member wherein the first rotor member (1) comprises a first fixing component (5) structured to mount the first rotor member to a hub mounting member, a fastener 9 that fastens the hub mounting member (note shown, see page of translation) to the first fixing component on the first rotor member and to the first fixing component on the first second rotor member so that the first rotor member and the first second rotor member are sandwiched between the fastener and the hub mounting member and so that the first rotor member and the first second rotor member are pressed towards each other with a compressive force by the fastener and the hub mounting member to prevent delamination of the first rotor member and the first second rotor member from each other; wherein at least a majority of the disk brake rotor apparatus between outermost lateral side surfaces thereof is substantially free of voids; wherein the first second rotor member is formed of a material having greater braking wear resistance than the first rotor member; and wherein the first second rotor member is pressure welded to the first rotor member. Otomo remains silent as to the means of fixing the rotor components. Shima discloses a similar rotor and further teaches pressure welding as a known means of assembly. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize assembly methods such as pressure welding as taught and demonstrated by Shima to assemble the rotor

of Otomo as an obvious means of manufacture, thereby ensuring proper durability and performance in the rotor and prevent failure of the brake discs comprised of dissimilar metals.

Claims 5 and 7-8 are deemed by the examiner to be product by process claims. Product by process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps.

Regarding claim 9, Otomo and Shima et al remain silent as to the specific dimensions of the rotor elements. It would have been obvious to one of ordinary skill in the art at the time the invention was made to select the dimensions of the rotor elements as a matter of routine design and optimization, thereby providing the required strength and weight characteristics for the rotor.

Re claim 14, Otomo as modified does not teach wherein the fasteners are aluminum. It would have been obvious to one of ordinary skill in the art at the time the invention was made since aluminum fasteners are known for their corrosion resistance.

Claims 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Otomo and Shima et al, further in view of Seymour (US# 6343675).

Otomo as modified, does not teach wherein the hub mounting member comprises a centrally disposed hub attachment component structured to be mounted to the hub; and a rotor attachment component extending radially outwardly from the hub attachment component and structured to mount to the first fixing component, to the first second fixing component and to the second second fixing component. Seymour teaches

a hub mounting member (Figure 3) comprising a centrally disposed hub attachment component structured to be mounted to the hub; and a rotor attachment component extending radially outwardly from the hub attachment component and structured to mount to the first fixing component, to the first second fixing component and to the second second fixing component. It would have been obvious to one of ordinary skill in the ad at the time the invention was made to have provided the hub mounting member of Seymour in the apparatus of Otomo as modified in order to facilitate connection of the rotor to the hub.

Response to Arguments

Applicant's arguments filed 7/16/2008 have been fully considered but they are not persuasive.

Please note the 112 1st rejection above. It is not clear what degree of forces are required to prevent delamination. As the original disclosure fails to suggest this feature or any particular compressive forces provided by the fasteners, it is maintained that the limitations constitute new matter.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley T. King whose telephone number is (571) 272-7117. The examiner can normally be reached on 11:00-7:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on (571) 272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bradley T King/
Primary Examiner, Art Unit 3657

BTK